IN THE CLAIMS

Please cancel claims 1-47, all of the claims in the verified translation of PCT/DE02/03958. Please also cancel claims 1-48 filed under Article 19 on May 7, 2003. Please add new claims 49 -120, as follows.

Claims 1-48 (Cancelled).

49. (New) A method for reducing bending vibrations in at least one rotary cylinder of a processing machine including:

providing at least one journal for said at least one rotating cylinder;

supporting said at least one journal in a bearing;

providing a lever arm portion of said at least one journal of on a side of said bearing facing away from said at least one rotating cylinder;

providing an actuator and engaging said lever arm portion of said journal with said actuator.

providing signals for charging said actuator for exerting a bending stress for counteracting said bending vibration in said at least one rotating cylinder;

using said bearing as a pivot point for said bending stress;

determining an angle of rotation position of said at least one rotating cylinder;

providing a sequence of said signals as a function of said angle of rotation position; and

charging said actuator with said sequence of signals.

50. (New) The method of claim 49 further including providing said signal with a strength and direction of a counterforce being applied by said actuator.

51. (New) The method of claim 49 further including providing said signal with a size and direction of a required actuating path.

52. (New) The method of claim 49 further including charging said actuator with said sequence of signals in periodic repetitions during steady state operating of said at least one rotating cylinder.

53. (New) A method for reducing bending vibrations in at least one rotating cylinder of a processing machine including:

determining an angle of rotation position of said at least one rotating cylinder;

determining a course of said bending vibrations as a function of said angle of rotation position;

determining a course of a counterforce to be impressed on said at least one rotating cylinder as a function of said angle of rotation position;

providing a control and memory device;

storing and predicting said course of said bending vibrations and said counterforce in said control and memory device;

providing a signal corresponding to said course of said determined counterforce;

periodically charging said at least one rotating cylinder with said signal; and

selecting a length of said period corresponding to a whole number of full revolutions of said at least one rotating cylinder.

54. (New) The method of claim 53 further including providing at least one actuator and using said at least one actuator for charging said at least one rotating cylinder with said counterforce;

55. (New) The method of claim 54 further including at least one journal for said at least one rotating cylinder and engaging said at least one actuator with said at least one journal.

56. (New) The method of claim 49 further including using said actuator for changing a position of an axial bending line of said journal.

57. (New) The method of claim 55 further including using said actuator for changing a position of an axial bending line of said journal.

58. (New) The method of claim 55 further including supporting said at least one journal in a bearing, providing a lever end of said at least one journal on a side of said bearing facing away from said rotating cylinder, and using said bearing as a pivot point for a bending stress applied to said lever end by said at least one actuator.

59. (New) The method of claim 49 further including using said actuator and changing a position of said journal in a plane perpendicular to an axis of rotation of said rotating cylinder.

60. (New) The method of claim 55 further including using said actuator and changing a position of said journal in a plane perpendicular to an axis of rotation of said rotating cylinder.

61. (New) A method for reducing bending vibrations in at least one rotating cylinder of a processing machine including:

providing journals at ends of said at least one rotating cylinder;

supporting said journals in bearings;

providing an actuator and engaging at least one of said journals with said actuator;

providing a signal for charging said actuator for generating a counterforce;

determining an angle of rotation position of said at least one rotating cylinder;

predicting a course of said signal as a function of said angle of rotation position of said cylinder; and

changing a shape of an actual bending line of at least one of said journals using said actuator;

62. (New) The method of claim 61 further including providing said actuator with a component acting in a radial direction of said journal.

63. (New) The method of claim 58 further including engaging said actuator with said journal at a distance of between 100 mm and 230 mm from a center of said bearing.

64. (New) The method of claim 61 further including engaging said actuator with said journal at a distance of between 100 mm and 230 mm from a center of said bearing.

65. (New) The method of claim 63 further including providing an outboard bearing on said journal and engaging said actuator with said outboard bearing.

66. (New) The method of claim 64 further including providing an outboard bearing on said journal and engaging said actuator with said outboard bearing.

67. (New) The method of claim 63 further including providing said journal having a diameter of between 55 mm and 65 mm and engaging said actuator with said journal at a distance of between 125 mm and 175 mm.

68. (New) The method of claim 64 further including providing said journal having a diameter of between 55 mm and 65 mm and engaging said actuator with said journal at a distance of between 125 mm and 175 mm.

69. (New) The method of claim 63 further including providing said journal having a diameter of between 65 mm and 75 mm and engaging said actuator with said journal at a distance of between 150 mm and 230 mm.

70. (New) The method of claim 64 further including providing said journal having a diameter of between 65 mm and 75 mm and engaging said actuator with said journal at a distance of between 150 mm and 230 mm.

71. (New) The method of claim 61 further including engaging said actuator with said journal on a side of said bearing facing away from said rotating cylinder.

72. (New) The method of claim 61 further including periodically charging said actuator with said signal.

73. (New) The method of claim 52 further including setting a length of said period corresponding to a whole number of revolutions of said at least one rotating cylinder.

74. (New) The method of claim 72 further including setting a length of said period corresponding to a whole number of revolutions of said at least one rotating

cylinder.

75. (New) The method of claim 50 further including providing said counterforce as at least one discrete pulse.

76. (New) The method of claim 53 further including providing said counterforce as at least one discrete pulse.

77. (New) The method of claim 61 further including providing said counterforce as at least one discrete pulse.

78. (New) The method of claim 50 further including providing said counterforce as a function extending continuously within a period.

79. (New) The method of claim 53 further including providing said counterforce as a function extending continuously within a period.

80. (New) The method of claim 61 further including providing said counterforce as a function extending continuously within a period.

81. (New) The method of claim 50 further including relieving an existing pre-stress using said signal.

82. (New) The method of claim 53 further including relieving an existing pre-stress using said signal.

83. (New) The method of claim 61 further including relieving an existing pre-stress using said signal.

84. (New) The method of claim 50 further including correlating said counterforce directly with said angle of rotation position.

85. (New) The method of claim 51 further including correlating said counterforce directly with said angle of rotation position.

86. (New) The method of claim 53 further including correlating said counterforce directly with said angle of rotation position.

87. (New) The method of claim 61 further including correlating said counterforce directly with said angle of rotation position.

88. (New) The method of claim 52 further including determining a course of said bending vibration as a function of said angle of rotation position, determining a course of said counterforce as a function of said angle of rotation position, and storing said course of said bending vibration and said course of said counterforce in a control and memory device.

89. (New) The method of claim 61 further including delivering a course of said bending vibration as a function of said angle of rotation position, delivering a course of said counterforce as a function of said angle of rotation position, and storing said course of said bending vibration and said course of said counterforce in a control and memory device.

90. (New) The method of claim 53 further including providing a sensor and using said sensor for determining a course of said bending vibration.

91. (New) The method of claim 88 further including providing a sensor and using said sensor for determining a course of said bending vibration.

92. (New) The method of claim 89 further including providing a sensor and using said sensor for determining a course of said bending vibration.

93. (New) The method of claim 90 further including providing said actuator as said sensor.

94. (New) The method of claim 91 further including providing said actuator as said

sensor.

95. (New) The method of claim 92 further including providing said actuator as said sensor.

96. (New) The method of claim 49 further including providing said actuator as a piezo element.

97. (New) The method of claim 54 further including providing said actuator as a piezo element.

98. (New) The method of claim 61 further including providing said actuator as a piezo element.

99. (New) The method of claim 90 further including providing said actuator as a piezo element.

100. (New) The method of claim 91 further including providing said actuator as a piezo element.

101. (New) The method of claim 92 further including providing said actuator as a piezo element.

102. (New) A method for reducing bending vibrations in at least one rotating cylinder of a processing machine including:

providing at least one journal for said rotating cylinder;

providing at least one bending vibration inducing obstruction on a circumference of said rotating cylinder;

charging said at least one journal with a changeable force counteracting said bending vibration; and

applying said changeable force at least once during each revolution of

said rotating cylinder for each said obstruction.

103. (New) The method of claim 102 further including providing a second cylinder and counteracting bending vibrations in said rotating cylinder caused by a rolling-off of said at least one obstruction on said second cylinder.

104. (New) The method of claim 103 further including providing one changeable force for each said obstruction.

105. (New) The method of claim 102 further including providing a second cylinder in contact with said rotating cylinder and relating said changeable force to an excitation caused by a rolling-off of said at least one obstruction on said second cylinder.

106. (New) The method of claim 102 further including providing a bearing supporting said at least one journal and applying said changeable force on said at least one journal on a side of said bearing facing away from said rotating cylinder.

107. (New) The method of claim107 further including providing said rotating cylinder as a cylinder of a printing press.

108. (New) The method of claim 49 further including providing said rotating cylinder as a cylinder of a processing machine for web-stamped materials.

109. (New) A device for reducing bending vibrations in at least one rotating cylinder of a processing machine comprising:

first and second journals at ends of said at least one rotating cylinder;

inboard bearings supporting said first and second journals adjacent said at least one rotating cylinder;

outboard bearings spaced on said journals at an axial distance of 100 mm

to 230 mm from the center of said inboard bearings; and

at least one actuator, adapted to counteract said bending vibrations, in engagement with each of said outboard bearings.

110. (New) The device of claim 109 wherein said outboard bearing is periodically charged with a pulse of 5 to 15 kN.

111. (New) The device of claim 109 wherein each outboard bearing is charged with a prestress of 5 to 15 kN and is periodically relieved.

112. (New) The device of claim 109 wherein said rotating component has a barrel length and a barrel diameter and further wherein a ratio of said barrel length and said barrel diameter lies between 7 to 1 and 11 to 1.

113. (New) The device of claim 109 wherein said rotating cylinder is a cylinder of a printing press.

114. (New) The device of claim 109 wherein said rotating cylinder is a cylinder of a printing machine and further including at least a second cylinder acting with said first cylinder as a first cylinder pair in a print-on position.

115. (New) The device of claim 114 wherein only one of said cylinder and said second cylinder is engaged by said at least one actuator.

116. (New) The device of claim 114 further including a second cylinder pair, said first cylinder pair and said second cylinder pair constituting a double print position, each said cylinder pair having an outside located cylinder, each said outside located cylinder having one of said actuators.

117. (New) The device of claim 114 further including a second cylinder pair, said first cylinder pair and second cylinder pair constituting a double print position, each

said cylinder pair having an inside located cylinder, said inside located cylinders each having one of said actuators.

118. (New) The device of claim 114 further including a second cylinder pair, said first and second cylinder pairs constituting a double print position, each said cylinder pair having an inside cylinder and an outside cylinder, one inside cylinder and one outside cylinder having one of said actuators.

119. (New) The device of claim 114 further including a second cylinder pair, said first and second cylinder pairs constituting a double print position, each said cylinder pair including an inside cylinder, one of said inside cylinders having said at least one actuator.

120. (New) The device of claim 114 further including a second cylinder pair, said first cylinder pair and said second cylinder pair constituting a double print position, each of said cylinders having one of said actuators.